



In 2008, the Maryland Department of Agriculture’s (MDA) Nutrient Management Program continued to focus on compliance and enforcement of the Nutrient Management Law in order to meet the state’s nutrient reduction goals and protect water quality in streams, rivers and the Chesapeake Bay. Achieving full compliance and implementation of the law along with strong MDA enforcement and reporting will not only improve the environment and our crop management; it will go a long way toward enhancing the image and credibility of farmers and other land managers among non-farmers. Both are top priorities for MDA and the O’Malley-Brown Administration as Bay restoration and sound farming practices move forward.

By the end of the calendar year, nutrient management plans and Annual Implementation Reports (AIRs) had been submitted by 98 percent of the 6,000 farmers covered under the law. The AIRs document how farmers implemented their nutrient management plans. Progressive enforcement actions—including warnings and fines—are underway against farmers who have not submitted their plans to MDA.

On the non-farm side, MDA’s urban nutrient management program continued to focus on enforcement of nutrient applicator requirements. Regulated managers of golf courses, public grounds and other urban lands are required to take soil tests, follow University of Maryland fertilizer application recommendations and keep certain records of fertilizer use. In 2008, MDA inspected 52 firms and issued 12 warnings ordering urban land managers to correct their programs or face fines of up to \$1,000. Failure to take soil tests was the most common compliance issue.

For most Bay advocates, however, proper implementation of Maryland’s nutrient management regulations remains at the heart of the matter. This report spells out nutrient management compliance, implementation and enforcement activities during 2008. The results show that the vast majority of farmers and regulated urban land managers are strongly committed to improving water quality and are complying with the Nutrient Management Law. The report also shows that while MDA continues to improve how well it implements the Nutrient Management Program, more personnel and resources are needed to fully accomplish the goals of the program.

I invite you to read the following report to learn more about our progress and accomplishments in 2008.

Sincerely,

Roger L. Richardson, Maryland Secretary of Agriculture



Maryland  
Department of Agriculture  
Office of Resource Conservation  
Nutrient Management Program

[www.mda.state.md.us](http://www.mda.state.md.us)

**Nutrient Management Offices**

**Region 1: Allegany, Garrett and Washington counties**

Maryland Department of Agriculture  
Nutrient Management Program  
3 Pershing Street, Room 100  
Cumberland, MD 21502  
301-722-9193

**Region 2: Carroll, Frederick, Howard and Montgomery counties**

Maryland Department of Agriculture  
Nutrient Management Program  
92 Thomas Johnson Drive, Suite 110  
Frederick, MD 21702  
301-694-9290, ext. 136 or 137

**Region 3: Anne Arundel, Calvert, Charles, Prince George’s and St. Mary’s counties**

Maryland Department of Agriculture  
Nutrient Management Program  
50 Harry S. Truman Parkway  
Annapolis, MD 21401  
410-841-5934 or 410-841-5949

**Region 4: Baltimore, Cecil, Harford and Kent counties**

Maryland Department of Agriculture  
Nutrient Management Program  
19 Newport Drive, Suite 106  
Forest Hill, MD 21050  
410-838-6181

**Region 5: Caroline, Dorchester, Queen Anne’s and Talbot counties**

Maryland Department of Agriculture  
Nutrient Management Program  
317 Carter Avenue, Suite 100  
Denton, MD 21629  
410-479-4905 or 410-479-4929

**Region 6: Somerset, Wicomico and Worcester counties**

Maryland Department of Agriculture  
Nutrient Management Program  
27722 Nanticoke Road, Unit 2  
Salisbury, MD 21801  
410-677-0802



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Anthony G. Brown, *Lt. Governor*  
Roger L. Richardson, *Secretary*  
Earl F. Hance, *Deputy Secretary*



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**Urban Nutrient Management Program**

**Enforcement**

MDA regulates individuals and companies that apply fertilizer to 10 or more acres of non-agricultural land, including lawn care companies, golf courses, public parks, airports, athletic fields and state-owned land such as recreation areas and highway right-of-ways. These urban land managers are required to take soil tests, follow the fertilizer recommendations of the University of Maryland Cooperative Extension and keep certain records of fertilizer applications.

Approximately 700 operations—including 200 golf courses and 400 lawn care service providers—are regulated by the urban nutrient management program and approximately 10 percent are inspected each year to ensure compliance. In 2008, MDA reviewed the fertilizer records of 52 individuals/firms to determine program compliance. Following these inspections, MDA issued warnings to six firms/individuals advising them to correct their deficiencies within a specified period of time or face fines of up to \$1,000. No fines have been issued to date. Failure to take soil tests was the most common compliance issue.

Twenty-one follow-up reviews involving companies with previous compliance issues were also conducted during the year resulting in six additional warnings.

**Training**

This year, the Nutrient Management Program offered its first training class held entirely in Spanish for lawn care workers. *Practical Training for Turfgrass Technicians* was designed specifically for employees of lawn care companies. Approximately 50 participants attended the sold out class to learn how to take a soil sample, understand a fertilizer label, measure a lawn, interpret soil test results and calibrate a fertilizer spreader.

In the past, this class was held in English and a translator was provided for Spanish-speaking participants. However, due to the popularity of the course, an all-Spanish class became necessary. Importantly, the Spanish-speaking instructor, a former MDA employee, has a background in lawn care and experience in turf management for golf courses.

**Urban Nutrient Management Workgroup**

According to a 2006 Maryland Turfgrass Industry Survey and data provided by the Scotts Miracle-Gro Company, approximately 350,000 acres of Maryland lawns are fertilized by homeowners. The Urban Nutrient Management Workgroup—comprised of representative from MDA, the University of Maryland Cooperative Extension, Maryland’s Tributary Teams, the turfgrass industry and local governments—advises the state on ways to achieve urban nutrient management goals. The group has been instrumental in producing many homeowner publications and has worked with the fertilizer industry to provide educational materials in retail stores and reduce the phosphorus content in lawn fertilizer products sold in Maryland.

**Maryland Urban Lands Planted in Turf & Regulated by MDA**

Type of Use	Approx. Acres Planted in Turf*	Approx. Acres Regulated by MDA
Unfertilized Home Lawns	468,450	0
Home Lawns Fertilized by Homeowners	351,337	0
Homes That Use a Lawn Care Service	117,113	105,402
State and Local Parks/Facilities	100,000	98,910
Schools/Athletic Fields	38,400	35,335
Golf Courses	16,400	16,400
Cemeteries/Religious Facilities	13,600	3,620
State Highway Right-of-Ways	9,000	9,000
Apartment Grounds	7,500	3,750
Airports	5,000	2,398
<b>Total Acres in Urban Turf:</b>	<b>1,126,800</b>	<b>274,815</b>

\* Source: Maryland Turfgrass Industry and Scotts Miracle-Gro Company



# Nutrient Management in Maryland 2008 Accomplishments Report



Maryland  
Department of Agriculture  
Office of Resource Conservation  
Nutrient Management Program





# Maryland’s Nutrient Management Law

The Water Quality Improvement Act of 1998 requires all farmers grossing \$2,500 a year or more or livestock producers with 8,000 pounds or more of live animal weight to run their operations using a nutrient management plan. These science-based documents help farmers manage fertilizers, animal waste and other nutrient sources more efficiently in order to meet crop needs while protecting water quality in streams, rivers and the Chesapeake Bay. Plans that address both nitrogen and phosphorus inputs are required for all agricultural land used to produce plants, food, feed, fiber, animals or other agricultural products. Farmers are required to keep their nutrient management plans current, take new soil samples a minimum of once every three years and file annual reports with MDA describing how they implemented their nutrient management plans during the previous year.

Farmers who own or manage 10 or more acres of agricultural land and apply their own nutrients are required to attend a two-hour MDA-sponsored education program on nutrient application once every three years. Professionals and farmers certified to prepare nutrient management plans are required to take continuing education courses in order to keep abreast of the latest nutrient management technologies and regulations. Non-agricultural nutrient applicators, including commercial lawn care companies, landscapers, golf course managers and public groundskeepers, are required by law to follow Maryland Cooperative Extension guidelines when applying nutrients to lawns, athletic fields or other landscapes.

## Agricultural Compliance and Enforcement Program

In order to verify compliance with the Nutrient Management Program, MDA’s six nutrient management specialists review nutrient management plans submitted by farmers, analyze Annual Implementation Reports and perform on-farm inspections to make sure that plans are current and are being implemented properly. MDA has authority to issue fines and penalties, take administrative actions and pursue judicial actions, including civil and criminal proceedings. The following is a summary of MDA’s enforcement activities for 2008:

### Implementation Programs

#### Nutrient Management Plan Submissions

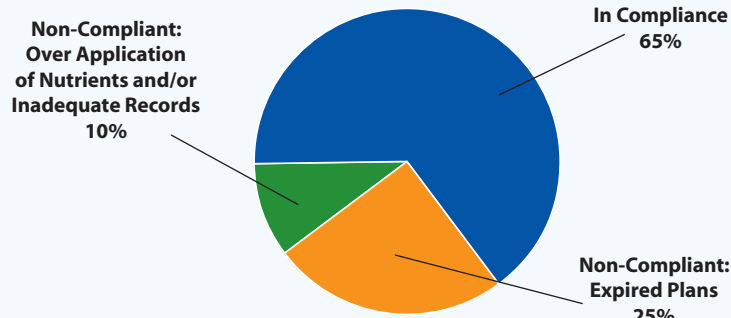
Farmers are required to submit a Nutrient Management Plan to MDA that has been developed by a certified consultant or a farm operator who is trained and certified to develop a plan solely for his or her operation. In 2008, MDA ramped up enforcement efforts to bring approximately 300 farmers who did not have nutrient management plans into compliance with the law. As a result of these efforts, most farmers submitted their plans to MDA and progressive enforcement actions are being pursued against the 133 farmers who remain out of compliance with the program. As of December 2008, nutrient management plans have been submitted for 99 percent of Maryland’s farmland, or 1.2 million acres.

#### Annual Implementation Reports

Farmers are required to keep their nutrient management plans current and submit an Annual Implementation Report (AIR) to MDA by March 1 of each year describing how they implemented their plans.

In 2008, MDA issued 1,700 warning letters to farmers who failed to file their AIRs, followed by 680 notifications of pending fines. Fines have been levied against 114 farmers who remain out of compliance. As of December 2008, AIRs have been submitted for 99 percent of Maryland’s farmland or 1.2 million acres.

### On-Farm Plan Implementation Reviews and Inspections



#### On-Farm Plan Implementation Reviews and Inspections

In 2008, MDA conducted 450 on-farm plan implementation reviews and inspections to verify that nutrient management plans are current and being implemented properly. These inspections target farmers who submitted their AIRs late or have not yet submitted their AIRs,



operations with a history of compliance problems and certain high risk animal operations and farms that use manure, imported organic wastes or sludge. Of the 450 farms inspected, 65 percent were in compliance. Approximately 25 percent were found to be out of compliance due to expired plans and 10 percent failed their inspections due to over application of nutrients and/or inadequate records. MDA has initiated actions to bring these farmers into compliance with program requirements.

## Certification and Licensing Programs

### Nutrient Management Consultant Certification

The Nutrient Management Program trains and certifies qualified applicants to provide farmers with customized nutrient management plans that balance crop nutrient needs with natural resources protection. Proper storage, handling and application of commercial fertilizers, biosolids and animal manure are emphasized. In 2008, MDA certified 15 new consultants who passed the Nutrient Management Certification Exam, bringing to 1,105 the number of consultants who have successfully been trained by the program. The figure includes 192 consultants who operate under licenses and are actively writing plans and an additional 28 Maryland Cooperative Extension consultants who are funded by MDA.



To ensure the quality of plans written by certified consultants, MDA conducts periodic reviews and field inspections. In 2008, MDA specialists conducted 200 field inspections while evaluating approximately 232 plans for MDA cost-share projects to make certain that they met regulatory standards. Overall, approximately 89 percent of the consultants inspected passed their reviews, a two percent increase over last year. MDA continues to work with consultants to improve their performance.

### Certification Exam Workshop

Individuals interested in taking the Nutrient Management Certification Examination may attend a two-day training course sponsored by MDA that prepares them for the rigorous exam. In 2008, 28 individuals attended the *Fundamentals of Nutrient Management* workshop, bringing to 1,614 the total number of individuals that have taken the training since 1993.

### Farmer Training and Certification Program

A Farmer Training and Certification (FTC) Program is available to farmers who want to become certified to write their own nutrient management plans. Specialized workshops are offered regionally for livestock, poultry, crop and nursery and greenhouse operations.

To become certified, farmers must learn the nuts and bolts of nutrient management planning, pass a specialized nutrient management exam specific to their operations and work with an MDA or University of Maryland Cooperative Extension expert to develop the first plan for their operations.

In 2008, MDA trained and certified 59 farmers to write their own nutrient management plans. Since the FTC program began in 2005, MDA has certified 293 farmers to write nutrient management plans for their own operations. This figure represents five percent of farmers required to have a nutrient management plan.

## Applicator Voucher Training

Individuals who apply any nutrients to 10 or more acres of cropland that they own or rent are required to attend an applicator training course once every three years. In 2008, MDA and the University of Maryland Cooperative Extension conducted 48 voucher training sessions attended by 971 participants. As of December 31, 2008, MDA has issued 5,078 nutrient applicator vouchers.

## Continuing Education

Nutrient management consultants are required to take six hours of continuing education classes in order to renew their certificates following the first year of certification and 12 hours of continuing education classes every three years thereafter. In addition, certified farmers are required to attend six hours of continuing education classes every three years in order to remain eligible to update and revise their plans. In 2008, MDA, in partnership with the University of Maryland Cooperative Extension, offered 31 comprehensive continuing education workshops on numerous topics ranging from *Practical Experiences in Nutrient Management* to *Advanced Nitrogen*. Approximately 800 participants attended the training during the year.

Additionally, MDA reviewed and approved 44 workshops and training programs sponsored by recognized organizations and neighboring universities to help consultants fulfill their continuing education requirements. These were attended by 855 participants.

## Incentive Programs

### Nutrient Management Consulting Services

Financial assistance is available to farmers who hire private, non-government consultants to develop or update nutrient management plans for their farms. The Maryland Agricultural Water Quality Cost-Share (MACS) Program provides grants to cover one nutrient management plan/update per operator, per year. The reimbursement rate is 87.5 percent of the cost of the plan, up to \$3,000 per operation. Certain out-of-pocket expenses incurred by farmers certified to develop their own plans and operators whose plans are developed by Extension consultants may also be eligible for financial assistance.

In 2008, MACS provided \$227,409 in cost-share grants to 185 farmers who hired private consultants to develop nutrient management plans covering 120,500 acres of farmland. Due to funding limitations, the program exhausted its budget within the first three months of State Fiscal Year 2008 and stopped accepting new cost-share applications.



### Manure Transport Program

Maryland’s Manure Transport Program provides poultry and livestock farmers with cost-share funds to remove excess manure from their farms that poses a threat to water quality. Poultry, dairy, beef and other animal producers with high soil phosphorus levels or inadequate acreage to spread their manure may apply for cost-share grants of up to \$20 per ton to transport excess manure to other facilities that can use the product in an environmentally safe manner. Cost-share rates are 20 percent higher for farms located in Dorchester, Somerset, Wicomico and Worcester counties.

In 2008, 132 farmers received \$520,357 in state grant payments to transport 99,817 tons of manure to approved farms and businesses. Delmarva poultry companies provided matching funds to transport poultry litter, bringing the total amount of financial support provided to farmers through the transport program to \$891,340.

